

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/545,998B
Source: 1FW16
Date Processed by STIC: 8/10/05

ENTERED

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**CRF Errors Edited by the STIC Systems
Branch**

Serial Number: 09/545,998B

CRF Edit Date: 8/10/05
Edited by: SN

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

___ Deleted: invalid beginning/end-of-file text ; page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

___ Other:



IFW16

RAW SEQUENCE LISTING

DATE: 08/10/2005

PATENT APPLICATION: US/09/545,998B

TIME: 14:51:48

Input Set : N:\AMC\PTO.AMC.txt

Output Set: N:\CRF4\08102005\I545998B.raw

SEQUENCE LISTING

```

4 (1) GENERAL INFORMATION:
6     (i) APPLICANT: Gorman, Daniel M.
7         Randall, Troy D.
8         Zlotnik, Albert
10    (ii) TITLE OF INVENTION: MAMMALIAN CELL SURFACE ANTIGENS; RELATED
11         REAGENTS
13    (iii) NUMBER OF SEQUENCES: 9
15    (iv) CORRESPONDENCE ADDRESS:
16        (A) ADDRESSEE: DNAX Research Institute
17        (B) STREET: 901 California Avenue
18        (C) CITY: Palo Alto
19        (D) STATE: California
20        (E) COUNTRY: USA
21        (F) ZIP: 94304-1104
23    (v) COMPUTER READABLE FORM:
24        (A) MEDIUM TYPE: CD-R
25        (B) COMPUTER: IBM PC compatible
26        (C) OPERATING SYSTEM: PC-DOS/MS-DOS
27        (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
29    (vi) CURRENT APPLICATION DATA:
C--> 30        (A) APPLICATION NUMBER: US/09/545,998B
C--> 31        (B) FILING DATE: 10-Apr-2000
32        (C) CLASSIFICATION:
42    (vii) PRIOR APPLICATION DATA:
35        (A) APPLICATION NUMBER: US 08/911,423
36        (B) FILING DATE: 16-AUG-1996
39        (A) APPLICATION NUMBER: US 60/023,419
40        (B) FILING DATE: 16-AUG-1996
43        (A) APPLICATION NUMBER: US 60/027,901
44        (B) FILING DATE: 07-OCT-1996
46    (viii) ATTORNEY/AGENT INFORMATION:
47        (A) NAME: Hill, Laurie L.
48        (B) REGISTRATION NUMBER: 51,804
49        (C) REFERENCE/DOCKET NUMBER: 140942000510
51    (ix) TELECOMMUNICATION INFORMATION:
52        (A) TELEPHONE: 858-720-5100
53        (B) TELEFAX: 858-720-5125
56 (2) INFORMATION FOR SEQ ID NO: 1:
58     (i) SEQUENCE CHARACTERISTICS:
59         (A) LENGTH: 1073 base pairs
60         (B) TYPE: nucleic acid
61         (C) STRANDEDNESS: single

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TIME: 14:51:48

Input Set : N:\AMC\PTO.AMC.txt

Output Set: N:\CRF4\08102005\I545998B.raw

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62      (D) TOPOLOGY: linear
64      (ii) MOLECULE TYPE: cDNA
67      (ix) FEATURE:
68          (A) NAME/KEY: CDS
69          (B) LOCATION: 68..751
72      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
74 CTCGAGATCC ATTGTGCTGG AAAGGGAACT CCTGAAATCA GCCGACAGAA GACTCAGGAG      60
76 AAGCACT ATG GGG GCA TGG GCC ATG CTG TAT GGA GTC TCG ATG CTC TGT      109
77      Met Gly Ala Trp Ala Met Leu Tyr Gly Val Ser Met Leu Cys
78      1          5          10
80 GTG CTG GAC CTA GGT CAG CCG AGT GTA GTT GAG GAG CCT GGC TGT GGC      157
81 Val Leu Asp Leu Gly Gln Pro Ser Val Val Glu Glu Pro Gly Cys Gly
82 15          20          25          30
84 CCT GGC AAG GTT CAG AAC GGA AGT GGC AAC AAC ACT CGC TGC TGC AGC      205
85 Pro Gly Lys Val Gln Asn Gly Ser Gly Asn Asn Thr Arg Cys Cys Ser
86          35          40          45
88 CTG TAT GCT CCA GGC AAG GAG GAC TGT CCA AAA GAA AGG TGC ATA TGT      253
89 Leu Tyr Ala Pro Gly Lys Glu Asp Cys Pro Lys Glu Arg Cys Ile Cys
90          50          55          60
92 GTC ACA CCT GAG TAC CAC TGT GGA GAC CCT CAG TGC AAG ATC TGC AAG      301
93 Val Thr Pro Glu Tyr His Cys Gly Asp Pro Gln Cys Lys Ile Cys Lys
94          65          70          75
96 CAC TAC CCC TGC CAA CCA GGC CAG AGG GTG GAG TCT CAA GGG GAT ATT      349
97 His Tyr Pro Cys Gln Pro Gly Gln Arg Val Glu Ser Gln Gly Asp Ile
98          80          85          90
100 GTG TTT GGC TTC CGG TGT GTT GCC TGT GCC ATG GGC ACC TTC TCC GCA      397
101 Val Phe Gly Phe Arg Cys Val Ala Cys Ala Met Gly Thr Phe Ser Ala
102 95          100          105          110
104 GGT CGT GAC GGT CAC TGC AGA CTT TGG ACC AAC TGT TCT CAG TTT GGA      445
105 Gly Arg Asp Gly His Cys Arg Leu Trp Thr Asn Cys Ser Gln Phe Gly
106          115          120          125
108 TTT CTC ACC ATG TTC CCT GGG AAC AAG ACC CAC AAT GCT GTG TGC ATC      493
109 Phe Leu Thr Met Phe Pro Gly Asn Lys Thr His Asn Ala Val Cys Ile
110          130          135          140
112 CCG GAG CCA CTG CCC ACT GAG CAA TAC GGC CAT TTG ACT GTC ATC TTC      541
113 Pro Glu Pro Leu Pro Thr Glu Gln Tyr Gly His Leu Thr Val Ile Phe
114          145          150          155
116 CTG GTC ATG GCT GCA TGC ATT TTC TTC CTA ACC ACA GTC CAG CTC GGC      589
117 Leu Val Met Ala Ala Cys Ile Phe Phe Leu Thr Thr Val Gln Leu Gly
118          160          165          170
120 CTG CAC ATA TGG CAG CTG AGG AGG CAA CAC ATG TGT CCC CGA GAG ACC      637
121 Leu His Ile Trp Gln Leu Arg Arg Gln His Met Cys Pro Arg Glu Thr
122 175          180          185          190
124 CAG CCA TTC GCG GAG GTG CAG TTG TCA GCT GAG GAT GCT TGC AGC TTC      685
125 Gln Pro Phe Ala Glu Val Gln Leu Ser Ala Glu Asp Ala Cys Ser Phe
126          195          200          205
128 CAG TTC CCT GAG GAG GAA CGC GGG GAG CAG ACA GAA GAA AAG TGT CAT      733
129 Gln Phe Pro Glu Glu Glu Arg Gly Glu Gln Thr Glu Glu Lys Cys His
130          210          215          220

```

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132 CTG GGG GGT CGG TGG CCA TGAGGCCTGG TCTTCCTCTG TGCCCCAAGC      781
133 Leu Gly Gly Arg Trp Pro
134      225
136 CAGACGCTAC AAGACTTGCC CAGCTATACC CTTGGTGAGA GCAGGGGCCA TGCTCTGCAC      841
138 CCTTCCCTGG GCCTGGCCCT GCTCCCCTCA ACAGTGGCGG AAGTGGGTGT ATGAGAGCGG      901
140 TGAGTTACGA TTGGGCCCTA TGGCTGCCTT TCTCATTTGA CAGCTCTGTT GGAGTAGGGT      961
142 CTTTGGGCCC ACCAAGAGCA CCACGTTTAG CACAAGATCT TGTACAAGAA TAAATACTTG      1021
144 TTTAGTAACC TGAAAAAAAA AAAAAAAGG GCGGCCGCGG AGGCCGAATT CC      1073
147 (2) INFORMATION FOR SEQ ID NO: 2:
149     (i) SEQUENCE CHARACTERISTICS:
150         (A) LENGTH: 228 amino acids
151         (B) TYPE: amino acid
152         (D) TOPOLOGY: linear
154     (ii) MOLECULE TYPE: protein
156     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
158 Met Gly Ala Trp Ala Met Leu Tyr Gly Val Ser Met Leu Cys Val Leu
159   1      5      10      15
161 Asp Leu Gly Gln Pro Ser Val Val Glu Glu Pro Gly Cys Gly Pro Gly
162      20      25      30
164 Lys Val Gln Asn Gly Ser Gly Asn Asn Thr Arg Cys Cys Ser Leu Tyr
165      35      40      45
167 Ala Pro Gly Lys Glu Asp Cys Pro Lys Glu Arg Cys Ile Cys Val Thr
168      50      55      60
170 Pro Glu Tyr His Cys Gly Asp Pro Gln Cys Lys Ile Cys Lys His Tyr
171   65      70      75      80
173 Pro Cys Gln Pro Gly Gln Arg Val Glu Ser Gln Gly Asp Ile Val Phe
174      85      90      95
176 Gly Phe Arg Cys Val Ala Cys Ala Met Gly Thr Phe Ser Ala Gly Arg
177     100     105     110
179 Asp Gly His Cys Arg Leu Trp Thr Asn Cys Ser Gln Phe Gly Phe Leu
180     115     120     125
182 Thr Met Phe Pro Gly Asn Lys Thr His Asn Ala Val Cys Ile Pro Glu
183     130     135     140
185 Pro Leu Pro Thr Glu Gln Tyr Gly His Leu Thr Val Ile Phe Leu Val
186  145     150     155     160
188 Met Ala Ala Cys Ile Phe Phe Leu Thr Thr Val Gln Leu Gly Leu His
189     165     170     175
191 Ile Trp Gln Leu Arg Arg Gln His Met Cys Pro Arg Glu Thr Gln Pro
192     180     185     190
194 Phe Ala Glu Val Gln Leu Ser Ala Glu Asp Ala Cys Ser Phe Gln Phe
195     195     200     205
197 Pro Glu Glu Glu Arg Gly Glu Gln Thr Glu Glu Lys Cys His Leu Gly
198     210     215     220
200 Gly Arg Trp Pro
201 225
203 (2) INFORMATION FOR SEQ ID NO: 3:
205     (i) SEQUENCE CHARACTERISTICS:
206         (A) LENGTH: 1006 base pairs
207         (B) TYPE: nucleic acid

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RAW SEQUENCE LISTING

DATE: 08/10/2005

PATENT APPLICATION: US/09/545,998B

TIME: 14:51:48

Input Set : N:\AMC\PTO.AMC.txt

Output Set: N:\CRF4\08102005\I545998B.raw

```

208          (C) STRANDEDNESS: single
209          (D) TOPOLOGY: linear
211      (ii) MOLECULE TYPE: cDNA
214      (ix) FEATURE:
215          (A) NAME/KEY: CDS
216          (B) LOCATION: 1..723
219      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
221 ATG  GCA  CAG  CAC  GGG  GCG  ATG  GGC  GCG  TTT  CGG  GCC  CTG  TGC  GGC  CTG      48
222 Met  Ala  Gln  His  Gly  Ala  Met  Gly  Ala  Phe  Arg  Ala  Leu  Cys  Gly  Leu
223   1      5      10      15
225 GCG  CTG  CTG  TGC  GCG  CTC  AGC  CTG  GGT  CAG  CGC  CCC  ACC  GGG  GGT  CCC      96
226 Ala  Leu  Leu  Cys  Ala  Leu  Ser  Leu  Gly  Gln  Arg  Pro  Thr  Gly  Gly  Pro
227      20      25      30
229 GGG  TGC  GGC  CCT  GGG  CGC  CTC  CTG  CTT  GGG  ACG  GGA  ACG  GAC  GCG  CGC      144
230 Gly  Cys  Gly  Pro  Gly  Arg  Leu  Leu  Leu  Gly  Thr  Gly  Thr  Asp  Ala  Arg
231      35      40      45
234 TGC  TGC  CGG  GTT  CAC  ACG  ACG  CGC  TGC  TGC  CGC  GAT  TAC  CCG  GGC  GAG      192
235 Cys  Cys  Arg  Val  His  Thr  Thr  Arg  Cys  Cys  Arg  Asp  Tyr  Pro  Gly  Glu
236      50      55      60
238 GAG  TGC  TGT  TCC  GAG  TGG  GAC  TGC  ATG  TGT  GTC  CAG  CCT  GAA  TTC  CAC      240
239 Glu  Cys  Cys  Ser  Glu  Trp  Asp  Cys  Met  Cys  Val  Gln  Pro  Glu  Phe  His
240  65      70      75      80
242 TGC  GGA  GAC  CCT  TGC  TGC  ACG  ACC  TGC  CGG  CAC  CAC  CCT  TGT  CCC  CCA      288
243 Cys  Gly  Asp  Pro  Cys  Cys  Thr  Thr  Cys  Arg  His  His  Pro  Cys  Pro  Pro
244      85      90      95
246 GGC  CAG  GGG  GTA  CAG  TCC  CAG  GGG  AAA  TTC  AGT  TTT  GGC  TTC  CAG  TGT      336
247 Gly  Gln  Gly  Val  Gln  Ser  Gln  Gly  Lys  Phe  Ser  Phe  Gly  Phe  Gln  Cys
248      100     105     110
250 ATC  GAC  TGT  GCC  TCG  GGG  ACC  TTC  TCC  GGG  GGC  CAC  GAA  GGC  CAC  TGC      384
251 Ile  Asp  Cys  Ala  Ser  Gly  Thr  Phe  Ser  Gly  Gly  His  Glu  Gly  His  Cys
252      115     120     125
254 AAA  CCT  TGG  ACA  GAC  TGC  ACC  CAG  TTC  GGG  TTT  CTC  ACT  GTG  TTC  CCT      432
255 Lys  Pro  Trp  Thr  Asp  Cys  Thr  Gln  Phe  Gly  Phe  Leu  Thr  Val  Phe  Pro
256      130     135     140
258 GGG  AAC  AAG  ACC  CAC  AAC  GCT  GTG  TGC  GTC  CCA  GGG  TCC  CCG  CCG  GCA      480
259 Gly  Asn  Lys  Thr  His  Asn  Ala  Val  Cys  Val  Pro  Gly  Ser  Pro  Pro  Ala
260 145     150     155     160
262 GAG  CCG  CTT  GGG  TGG  CTG  ACC  GTC  GTC  CTC  CTG  GCC  GTG  GCC  GCC  TGC      528
263 Glu  Pro  Leu  Gly  Trp  Leu  Thr  Val  Val  Leu  Leu  Ala  Val  Ala  Ala  Cys
264      165     170     175
266 GTC  CTC  CTC  CTG  ACC  TCG  GCC  CAG  CTT  GGA  CTG  CAC  ATC  TGG  CAG  CTG      576
267 Val  Leu  Leu  Leu  Thr  Ser  Ala  Gln  Leu  Gly  Leu  His  Ile  Trp  Gln  Leu
268      180     185     190
270 AGG  AGT  CAG  TGC  ATG  TGG  CCC  CGA  GAG  ACC  CAG  CTG  CTG  CTG  GAG  GTG      624
271 Arg  Ser  Gln  Cys  Met  Trp  Pro  Arg  Glu  Thr  Gln  Leu  Leu  Leu  Glu  Val
272      195     200     205
274 CCG  CCG  TCG  ACC  GAA  GAC  GCC  AGA  AGC  TGC  CAG  TTC  CCC  GAG  GAA  GAG      672
275 Pro  Pro  Ser  Thr  Glu  Asp  Ala  Arg  Ser  Cys  Gln  Phe  Pro  Glu  Glu  Glu
276      210     215     220

```

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DATE: 08/10/2005

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TIME: 14:51:48

Input Set : N:\AMC\PTO.AMC.txt

Output Set: N:\CRF4\08102005\I545998B.raw

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278 CGG GGC GAG CGA TCG GCA GAG GAG AAG GGG CGG CTG GGA GAC CTG TGG      720
279 Arg Gly Glu Arg Ser Ala Glu Glu Lys Gly Arg Leu Gly Asp Leu Trp
280 225                230                235                240
282 GTG TGAGCCTGGC CGTCCTCCGG GGCCACCGAC CGCAGCCAGC CCCTCCCCAG      773
283 Val
286 GAGCTCCCCA GGCCGCAGGG GCTCTGCGTT CTGCTCTGGG CCGGGCCCTG CTCCCCTGGC      833
288 AGCAGAAGTG GGTGCAGGAA GGTGGCAGTG ACCAGCGCCC TGGACCATGC AGTTCGGCGG      893
290 CCGCTCTAAA GGATCCAAGC TTACGTACGC GTGCATGCGA CGTCATAGCT CTTCTATAGT      953
292 GTCACCTAAA TTCAATTCAC TGGCCGTCGT TTTACAACGT CCTGACTGGG AAA      1006
295 (2) INFORMATION FOR SEQ ID NO: 4:
297     (i) SEQUENCE CHARACTERISTICS:
298         (A) LENGTH: 241 amino acids
299         (B) TYPE: amino acid
300         (D) TOPOLOGY: linear
302     (ii) MOLECULE TYPE: protein
304     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
306 Met Ala Gln His Gly Ala Met Gly Ala Phe Arg Ala Leu Cys Gly Leu
307 1      5      10      15
309 Ala Leu Leu Cys Ala Leu Ser Leu Gly Gln Arg Pro Thr Gly Gly Pro
310      20      25      30
312 Gly Cys Gly Pro Gly Arg Leu Leu Gly Thr Gly Thr Asp Ala Arg
313      35      40      45
315 Cys Cys Arg Val His Thr Thr Arg Cys Cys Arg Asp Tyr Pro Gly Glu
316      50      55      60
318 Glu Cys Cys Ser Glu Trp Asp Cys Met Cys Val Gln Pro Glu Phe His
319 65      70      75      80
321 Cys Gly Asp Pro Cys Cys Thr Thr Cys Arg His His Pro Cys Pro Pro
322      85      90      95
324 Gly Gln Gly Val Gln Ser Gln Gly Lys Phe Ser Phe Gly Phe Gln Cys
325      100     105     110
327 Ile Asp Cys Ala Ser Gly Thr Phe Ser Gly Gly His Glu Gly His Cys
328      115     120     125
330 Lys Pro Trp Thr Asp Cys Thr Gln Phe Gly Phe Leu Thr Val Phe Pro
331      130     135     140
333 Gly Asn Lys Thr His Asn Ala Val Cys Val Pro Gly Ser Pro Pro Ala
334 145     150     155     160
336 Glu Pro Leu Gly Trp Leu Thr Val Val Leu Ala Val Ala Ala Cys
337      165     170     175
339 Val Leu Leu Leu Thr Ser Ala Gln Leu Gly Leu His Ile Trp Gln Leu
340      180     185     190
342 Arg Ser Gln Cys Met Trp Pro Arg Glu Thr Gln Leu Leu Leu Glu Val
343      195     200     205
345 Pro Pro Ser Thr Glu Asp Ala Arg Ser Cys Gln Phe Pro Glu Glu Glu
346      210     215     220
348 Arg Gly Glu Arg Ser Ala Glu Glu Lys Gly Arg Leu Gly Asp Leu Trp
349 225     230     235     240
351 Val
354 (2) INFORMATION FOR SEQ ID NO: 5:
356     (i) SEQUENCE CHARACTERISTICS:

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VERIFICATION SUMMARY

DATE: ~08/10/2005

PATENT APPLICATION: US/09/545,998B

TIME: 14:51:49

Input Set : N:\AMC\PTO.AMC.txt

Output Set: N:\CRF4\08102005\I545998B.raw

L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

**Raw Sequence Listing before editing,
for reference only**



IFW16

RAW SEQUENCE LISTING

DATE: 08/10/2005

PATENT APPLICATION: US/09/545,998B

TIME: 09:42:45

client).txt
Input Set : D:\14094-20005.10 - corrected seq list (original from

Output Set: N:\CRF4\08102005\I545998B.raw

SEQUENCE LISTING

4 (1) GENERAL INFORMATION:
6 (i) APPLICANT: Gorman, Daniel M.
7 Randall, Troy D.
8 Zlotnik, Albert
10 (ii) TITLE OF INVENTION: MAMMALIAN CELL SURFACE ANTIGENS; RELATED
11 REAGENTS
13 (iii) NUMBER OF SEQUENCES: 9
15 (iv) CORRESPONDENCE ADDRESS:
16 (A) ADDRESSEE: DNAX Research Institute
17 (B) STREET: 901 California Avenue
18 (C) CITY: Palo Alto
19 (D) STATE: California
20 (E) COUNTRY: USA
21 (F) ZIP: 94304-1104
23 (v) COMPUTER READABLE FORM:
24 (A) MEDIUM TYPE: CD-R
25 (B) COMPUTER: IBM PC compatible
26 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
27 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
29 (vi) CURRENT APPLICATION DATA:
C--> 30 (A) APPLICATION NUMBER: US/09/545,998B
C--> 31 (B) FILING DATE: 10-Apr-2000
32 (C) CLASSIFICATION:
42 (vii) PRIOR APPLICATION DATA:
35 (A) APPLICATION NUMBER: US 08/911,423
36 (B) FILING DATE: 16-AUG-1996
39 (A) APPLICATION NUMBER: US 60/023,419
40 (B) FILING DATE: 16-AUG-1996
43 (A) APPLICATION NUMBER: US 60/027,901
44 (B) FILING DATE: 07-OCT-1996
46 (viii) ATTORNEY/AGENT INFORMATION:
47 (A) NAME: Hill, Laurie L.
48 (B) REGISTRATION NUMBER: 51,804
49 (C) REFERENCE/DOCKET NUMBER: 140942000510
51 (ix) TELECOMMUNICATION INFORMATION:
52 (A) TELEPHONE: 858-720-5100
53 (B) TELEFAX: 858-720-5125

**Does Not Comply
Corrected Diskette Needed**

ERRORED SEQUENCES

590 (2) INFORMATION FOR SEQ ID NO: 9:

P.2

RAW SEQUENCE LISTING

DATE: 08/10/2005

PATENT APPLICATION: US/09/545,998B

TIME: 09:42:45

Input Set : D:\14094-20005.10 - corrected seq list (original from

client).txt

Output Set: N:\CRF4\08102005\I545998B.raw

592 (i) SEQUENCE CHARACTERISTICS:
593 (A) LENGTH: 6 amino acids
594 (B) TYPE: amino acid
595 (C) STRANDEDNESS: single
596 (D) TOPOLOGY: linear
598 (ii) MOLECULE TYPE: peptide
602 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
604 His His His His His His
605 1 5

E--> 609 1

VERIFICATION SUMMARY

DATE: 08/10/2005

PATENT APPLICATION: US/09/545,998B

TIME: 09:42:46

Input Set : D:\14094-20005.10 - corrected seq list (original from

client).txt

Output Set: N:\CRF4\08102005\I545998B.raw

L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:609 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:9

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